

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-95 (canceled)

96. (new) A method of diagnosing in an individual a recent exposure to *M. tuberculosis*, said method comprising:

- (a) providing a T cell-containing sample from said individual;
- (b) contacting separate aliquots of said sample with antigen compositions comprising either whole ESAT-6, or peptide epitopes derived from ESAT-6, in an ELISPOT assay in order to determine the frequency of antigen-responsive T cells which have been induced to secrete a cytokine, with the proviso that whole ESAT-6 or any of said peptide epitopes may be substituted by an analog which is recognized by said responsive T cells; and
- (c) evaluating whether, in each separate assay, there was a positive response; wherein a positive response using whole ESAT-6 or an analog thereof and a negative response using peptide epitopes or analogs thereof indicate that the individual has recently been exposed to *M. tuberculosis*.

97. (new) A method according to claim 96, wherein said peptide epitopes are 8 to 29 amino acids in length.

98. (new) A method according to claim 96, wherein a pool of at least four different peptide epitopes is employed.

99. (new) A method according to claim 96, wherein said peptide epitopes represent all possible peptide epitopes derived from ESAT-6.

100. (new) A method according to claim 96, wherein antigen presenting cells are present in said sample.

101. (new) A method according to claim 96, wherein said peptide epitopes are selected from the group consisting of:

MTEQQWNFAGIEAAA	(SEQ. ID NO: 1),
WNFAGIEAAASAIQG	(SEQ. ID NO: 2),
IEAAASAIQGNVTSI	(SEQ. ID NO: 3),
SAIQGNVTSIHSLLD	(SEQ. ID. NO: 4),
NVTSIHSLLDDEGKQS	(SEQ. ID. NO: 5),
HSLLDDEGKQSLTKLA	(SEQ. ID NO: 6),
EGKQSLTKLAAAWGG	(SEQ. ID.NO: 7),
LTKLAAAWGGSGSEA	(SEQ. ID.NO: 8),
AAWGGSGSEAYQGVQ	(SEQ. ID. NO: 9),
SGSEAYQGVQQKWD A	(SEQ. ID. NO: 10),
YQGVQQKWDATATEL	(SEQ. ID. NO: 11),
QKWDATATELNNALQ	(SEQ. ID. NO: 12),
TATELNNALQNLART	(SEQ. ID. NO: 13),
NNALQNLARTISEAG	(SEQ. ID. NO: 14),
NLARTISEAGQAMAS	(SEQ. ID. NO: 15),
ISEAGQAMASTE GNV	(SEQ. ID. NO: 16), and
QAMASTE GNV TGMFA	(SEQ. ID NO: 17).

102. (new) A kit for carrying out the method of claim 96, the kit comprising (i) whole ESAT-6 and (ii) peptide epitopes derived from ESAT-6, with the proviso that whole ESAT-6 or any of said peptide epitopes may be substituted by an analog which is recognized by T cells recognizing said whole ESAT-6 or said peptide epitopes, together with instructions for performing an ELISPOT assay.

103. (new) A kit of claim 102, wherein said peptide epitopes are 8 to 29 amino acids in length.

104. (new) A kit of claim 102, wherein there are at least four different peptide epitopes.

105. (new) A kit of claim 102, wherein said peptide epitopes represent all possible peptide epitopes derived from ESAT-6.

106. (new) A method of diagnosing in an individual a recent exposure to *M. tuberculosis*, said method comprising:

- (a) providing a T cell-containing sample from said individual;
- (b) contacting separate aliquots of said sample with antigen compositions comprising either whole ESAT-6, or peptide epitopes derived from ESAT-6, in an ELISPOT assay in order to determine the frequency of antigen-responsive T cells which have been induced to secrete a cytokine; and
- (c) evaluating whether, in each separate assay, there was a positive response; wherein a positive response using whole ESAT-6 and a negative response using peptide epitopes indicates that the individual has recently been exposed to *M. tuberculosis*.

107. (new) A method according to claim 106, wherein said peptide epitopes are 8 to 29 amino acids in length.

108. (new) A method according to claim 106, wherein a pool of at least four different peptide epitopes is employed.

109. (new) A method according to claim 106, wherein said peptide epitopes represent all possible peptide epitopes derived from ESAT-6.

110. (new) A method according to claim 106, wherein antigen presenting cells are present in said sample.

111. (new) A method according to claim 106, wherein said peptide epitopes are selected from the group consisting of:

M T E Q Q W N F A G I E A A A (SEQ. ID NO: 1),

W N F A G I E A A S A I Q G (SEQ. ID NO: 2),

IEAAASAIQGNVTSI	(SEQ. ID NO: 3),
SAIQGNVTSIHSLLD	(SEQ. ID. NO: 4),
NVTSIHSLLDEGKQS	(SEQ. ID. NO: 5),
HSLLDEGKQSLTKLA	(SEQ. ID NO: 6),
EGKQSLTKLAAAWGG	(SEQ. ID NO: 7),
LTKLAAAWGGSGSEA	(SEQ. ID NO: 8),
AAWGGSGSEAYQGVQ	(SEQ. ID. NO: 9),
SGSEAYQGVQQKWD A	(SEQ. ID. NO: 10),
YQGVQQKWDATATEL	(SEQ. ID. NO: 11),
QKWDATATELNNALQ	(SEQ. ID. NO: 12),
TATELNNALQNLART	(SEQ. ID. NO: 13),
NNALQNLARTISEAG	(SEQ. ID. NO: 14),
NLARTISEAGQAMAS	(SEQ. ID. NO: 15),
ISEAGQAMASTE GNV	(SEQ. ID. NO: 16), and
QAMASTE GNV TGMFA	(SEQ. ID NO: 17),

112. (new) A kit for carrying out the method of claim 106, the kit comprising (i) whole ESAT-6 and (ii) peptide epitopes derived from ESAT-6, together with instructions for performing an ELISPOT assay.

113. (new) A kit of claim 112, wherein said peptide epitopes are 8 to 29 amino acids in length.

114. (new) A kit of claim 112, wherein there are at least four different peptide epitopes.

115. (new) A kit of claim 112, wherein said peptide epitopes represent all possible peptide epitopes derived from ESAT-6.